

July 31, 2001

To: The Governor's Advisory Council on School Funding

From: Amy Carlson
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RE: Current issues in school funding

HB625 begins the discussion regarding evaluating school funding in Montana. This paper attempts to draw out some of the underlying issues contained in HB625 with regard to the funding and budgeting of districts. The intention is to give the reader a background in these topics and when available, lay out options that have been discussed locally, or ways that other states handle the issues.

The following are the items listed in HB625 that are considered in this paper.

- (a) analyzing the factors currently in law that are used to compute budget authority for schools to determine if additional factors or changes in those factors are necessary to equitably provide budget authority to public schools;
- (b) determining the appropriate allocation of funding to adequately fund elementary, middle school, seventh and eighth grade, and high school programs;
- (d) determining if the current budget computations are prohibiting or discouraging local decisions to consolidate school districts;
- (e) determining the adequacy and equity of the current statutory authority for public schools to access the funds necessary to provide facilities for school districts and state support for school facility costs;
- (l) analyzing the school district structure that currently exists and determining if reducing the number of districts could provide efficiency in the operations of the districts and make existing resources available for classroom activities; and
- (m) determining if the existence of 25 budgeted and nonbudgeted funds unreasonably restricts local decisionmakers.

All of the issues contained in HB625 are interrelated at some point and getting all the information available will be necessary to get a full picture of school funding in Montana. Topics not covered now (such as transportation) will be addressed in future meetings. Further research and analysis will be needed before the committee will be prepared to make decisions on these issues.

The first section of this paper begins looking at items (a), (b), and (l) from three perspectives: 1) declining enrollments and the impacts of fixed and variable

costs, 2) the relative funding of elementary and high schools, and 3) the relative funding of small and large schools. The goal of each of these analyses is to consider if the current formulas are accurately reflecting the costs for these schools and funding them relatively the same. The next sections begin the discussions on consolidation and facilities funding. The letters behind the title of each subject is a cross-reference to the letters of the subjects contained in HB625.

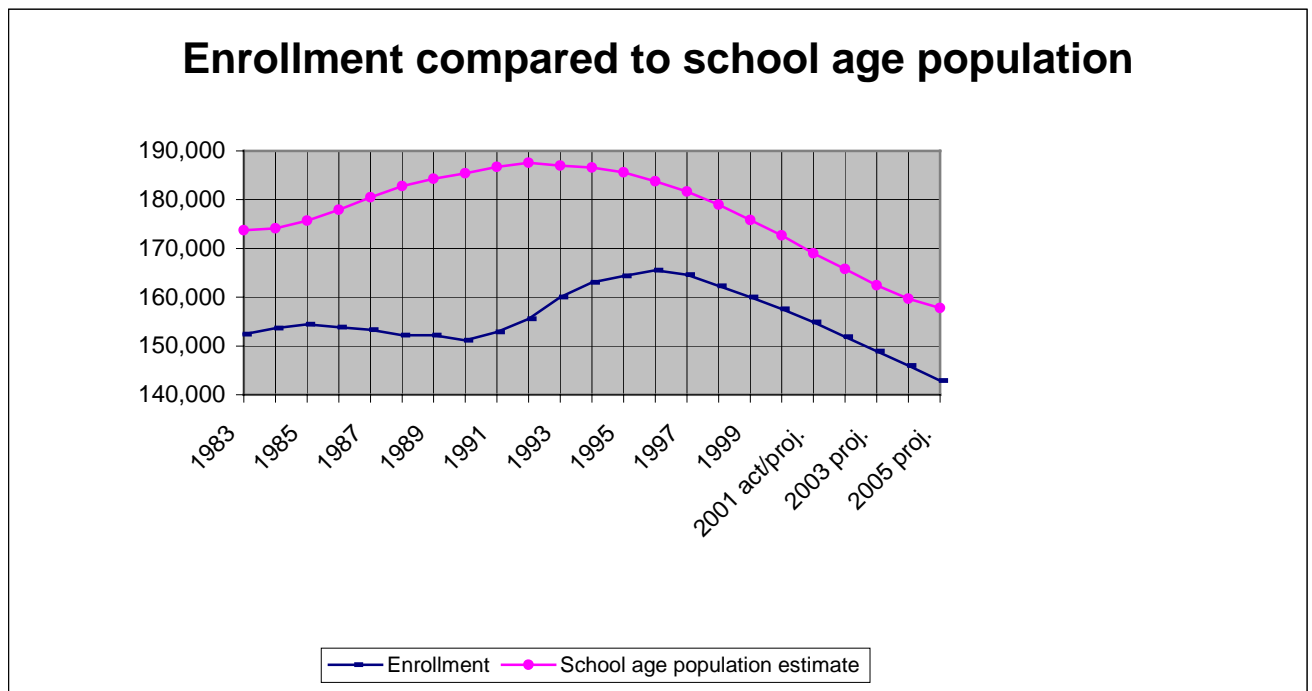
Impacts of demographics on the current funding formula (a, b, l)

Demographic analysis

Drop in the number of births in Montana

The echo of the baby boom peaked at 14,141 births in 1984. The birth rate has declined in almost every year since to 10,800 in 1996. In the past 5 years the birth rate seems to have stabilized to around 10,800 births per year.

To estimate the number of school age children from the number of births and the ages of the children (the total number ages 5-18), the available school age population (with no in or out migration) peaked at 187,568 in 1992, in 2001 this number is 172,674 and in 2005 it will be 159,700. If the birth rate continues at 10,800 per year, the available school age population based solely on birth rate will level out at 151,200 in 2015. The steepest declines will be in the years 2000 to 2004 which will be at a rate of more than 3,000 per year. (Note: nationally demographers anticipate the school age population will begin to increase after 2010.) The following chart demonstrates:



In migration and out migration

Changes in enrollment are also affected by migration. As shown in the previous chart, the changes in slope between the sum of the births of the school age population and actual enrollment varied significantly prior to 1997. The differences in slopes are caused by migration. During the eighties many people migrated out of the state and during the nineties migration was into the state. Comparing births of the prior 18 years to census data further demonstrates this point.

<u>Year</u>	<u>Births</u>	<u>Census <18 years</u>	<u>% difference</u>
1990	233,797	222,104	-5%
2000	215,004	230,062	+7%

This analysis is consistent with the Montana Context section of the "Montana Statewide Education Profile" (Profile). However as indicated in the "Profile", the in-migration trend may be reversing. In the fall of 2000, for the first time in many years, the number of births six years prior was higher than the first grade enrollment, indicating that out-migration may be occurring.

Preference for private and home schooling

In 1995 (first year available), 2,910 students were recorded as being in home schools and 8,587 in private schools for a total of 11,497 or 6.5% of reported school children. In 2000, 3,447 students were recorded as being in home schools and 8,818 in private schools for a total of 12,265 students or 7.2% of reported school children. The preference for private and home schooling appears to have increased slightly in recent years, but is a relatively small portion of the population.

Enrollment declines and General Fund Budget Caps

District general fund budgets have been moving toward the maximum since the initiation of the current funding formula in FY 1994. Table 1 on the following page demonstrates the distribution of districts within the general fund "equalization window" over time. By 1998 all districts were required to be at or above BASE.

The number of districts above the general fund maximum decreased from FY 1994 to FY2000. This trend ended when the law changed in the 1999 session and allowed districts with declining enrollments to remain above maximum for up to 5 years.

In FY 2001, 185 districts are at or above 97% of maximum budgets and no districts are below BASE budgets (as required by law). FY 1995 shows a wider distribution of districts. 106 districts had not yet budgeted up to the BASE

funding level and 106 districts were budgeted at 97% or greater of the maximum budgets. The dispersion of districts throughout the window was greater.

Districts General Fund Budgets Relative to Maximum							
Table 1							
Count of districts	Year						
percent group	1995	1996	1997	1998	1999	2000	2001
below Base	106	69	41				
Base	70	69	84	130	112	104	95
<90%	129	131	123	103	98	102	96
<97%	60	69	82	71	79	64	72
97% to Max	48	86	96	123	138	156	147
Over max	58	42	37	30	29	26	38
Grand Total	471	466	463	457	456	452	448

As the formula is designed, declining enrollments decrease the maximum budget of districts by the per ANB entitlement (number of students times the entitlement). So a district that maintained the same budget over a period of declining enrollment would increase its adopted budget's percentage of the maximum budget. At some point under this scenario all districts would be at the maximum general fund budget. When the district is at the maximum, it must decrease the adopted budget by the per ANB entitlement.

The formula as crafted by the legislature and demanded by the courts forces districts within an equalized range. The formula forces down budgets as enrollments decline in order to stay within the equalized range. This causes difficult budget decisions for districts and concerns among stakeholders.

Solutions that have been proposed

The concern over declining enrollments has been significant and several options have been discussed.

1) Graduated Basic Entitlement

Background discussion of variable and fixed components

As a result of the heavy reliance on variable cost funding, recent declining enrollments have been linked to the financial trouble schools have had in recent years. The Montana formula lags enrollment declines one year, which gives district a short period of time to adjust their variable costs. All districts receive a Basic Entitlement ranging from K-8 (without middle school) districts receiving \$18,889 to High School districts that receive \$209,873 in FY 2002. Elementary districts with middle schools get a prorated amount between the elementary and

high school Basic Entitlement. Table 2 demonstrates the percentage of a budget that is fixed at various sizes.

Examples of General Fund Entitlement formula

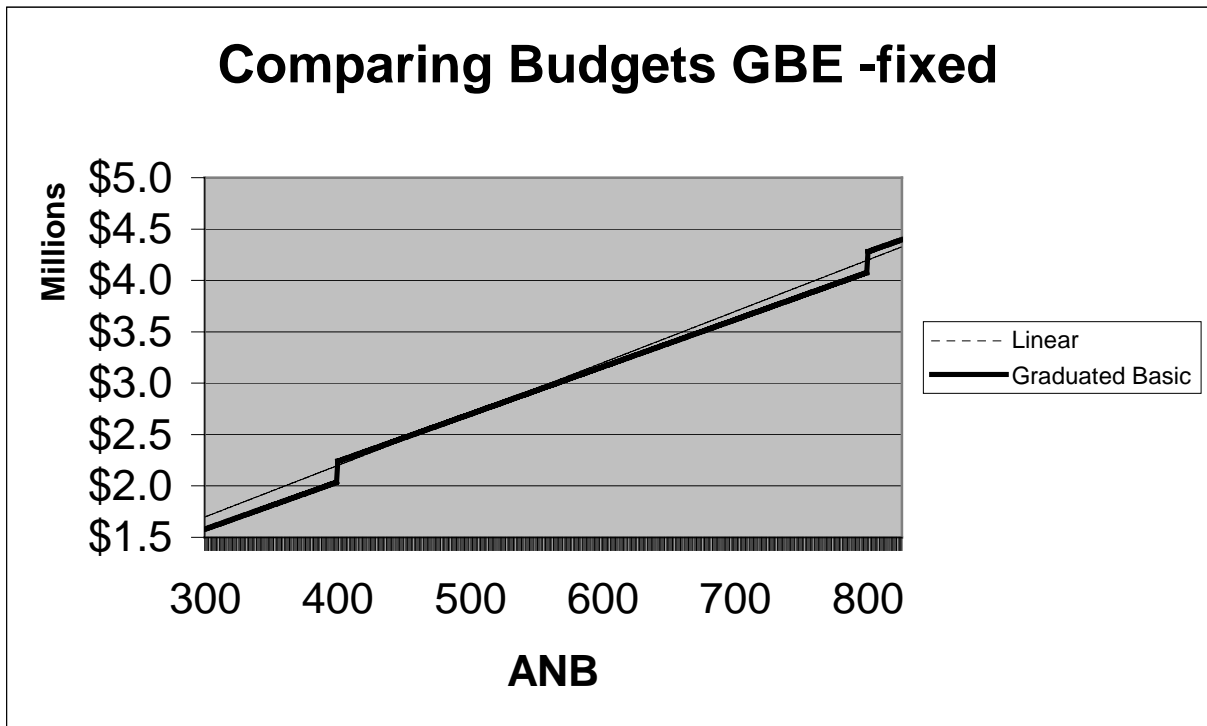
Table 2

	Elementary ANB	MS ANB	HS ANB	Basic Entitlement	Per ANB Entitlement	Maximum Budget	Basic Entitlement Share
1	50	-	-	\$18,889	\$191,455	\$210,344	9.0%
2	100	35	-	\$68,545	\$560,927	\$629,472	10.9%
3	1,005	364	-	\$70,455	\$5,578,914	\$5,649,369	1.2%
4	-	-	52	\$209,873	\$265,005	\$474,878	44.2%
5	-	-	1,576	\$209,873	\$7,581,972	\$7,791,845	2.7%

The Basic entitlement share of the total budget is very small in large districts. This results in a higher percentage of the budget that is variable. There is no current factor that adjusts funding for the number of schools within the district (except in the case of long distances). Large districts argue that each school should receive a Basic entitlement instead of just each district. This is otherwise known as the graduated basic entitlement (referred to as GBE – school).

If the graduated basic entitlement existed for each school within the district, the loss of the entitlement with a school closure would be a financial disincentive for a district to close a school, even if the enrollment of the school could be distributed to other neighboring schools. One of the current advantages for large districts is that they have options for moving the enrollment among schools. Adding a per-school entitlement would make it more difficult for large districts to use this tool in managing enrollments and costs. Also, it may not be reasonable for the state to support at different levels districts with the same enrollment, but with differing number of school buildings when the decision regarding the number of buildings is made locally.

Another version of the graduated basic entitlements adds an additional basic entitlement amount for a fixed X number of ANB. This version will be referred to as GBE – fixed. In the example shown below, the GBE – fixed formula allows \$200,000 for the enrollment up to 400, and an additional \$200,000 for each additional 400 ANB, the per ANB amount is \$4,600. The linear line is \$5,000 per ANB plus a Basic Entitlement of \$200,000. The example is designed to spend the same amount in total overall districts.



The goals are to: 1) decrease the dependence of districts on variable factors (ANB), 2) increase dependence on fixed factors, 3) and decrease the amount of budget authority lost at each point. For example a loss of ten ANB, from 500 to 490, drops the maximum budget \$50,000 under the linear plan and \$46,000 under the GBE-fixed. The concern with this plan is that it is still fully variable; it is just “lumpy” at certain fixed points. If a district starts this plan at 405 ANB and drops to 395 ANB, it faces a \$246,000 drop instead of a \$50,000 drop under the linear plan. If the levels of increased basic entitlement truly represented specific points in enrollment that demand a “lump” of more or less service, then the plan makes sense, but if not, most districts will benefit from the plan and a few that fall below the trigger will lose substantial budget authority.

2) Soft Caps SB390 and the 1999 regular session

As a result of concern about declining enrollments, the legislature passed a measure in SB 390 that enhanced a measure passed in the 1999 session that delays the reductions required by the funding formula by up to 5 years. This is referred to as “soft caps”. Local taxpayers alone fund this over maximum budget. The soft cap measures passed by the Legislature will continue to increase the number of districts above the maximum budgets and may, at least temporarily dis-equalize district budgets. Table 1 on page 4 shows how the 1999 version of soft caps affected the equalization window. For the first time since inception of

the new funding formula there is an increase in the number of districts budgeting over the maximum budgets.

3) Averaging or Lagging Enrollments

The concept of averaging the last X number of years of ANB and using that to determine the budget has been discussed for some time. This would slow the declining budgets currently facing most schools, but would slow the increase for schools with increasing enrollment. The districts that have increasing enrollments are usually concerned about this plan.

Table 3 shows actual changes in relative budgets in terms of the change in the percent of maximum budget from FY 1999 to FY 2000.

The Effect of Changing Enrollment on Districts Percentage of Maximum General Fund Budgets			
Table 3			
ANB change group	Change in the budget % of maximum	Average Percent change in ANB	Number of Districts
<-10%	4.7%	-21.8%	78
<0%	1.3%	-4.1%	173
< 10%	-0.5%	2.7%	152
>10%	-5.0%	34.7%	49
Grand Total	0.6%	-0.7%	452

The ANB change group averages all districts with an ANB change of decreasing more than 10%, decreasing less than 10%, increasing less than 10%, and increasing more than 10%. Of the districts that had ANB decreasing more than 10%, the average percent of maximum budget increased 4.7%. While districts with enrollments increasing more than 10% decreased budgets as a percentage of the maximum budget by 5.0%. This analysis would suggest that a short-term averaging of enrollments might not harm districts that have increasing enrollments, while it may assist districts with decreasing enrollments. A long average or lagging enrollments would not allow districts the opportunity to make the adjustments that they can and or need to in order to accommodate changes in enrollment.

Conclusion

There are offsetting issues at stake: on one hand we have fairness that all districts of the same size should get the same budget authority or state contribution, while on the other hand districts with declining enrollment can not

adjust to the declining enrollment. In the long run, districts should be able to adjust to declining enrollment, while in the short run it may be difficult. The solution for declining enrollment needs to be one that addresses short run concerns and allows equal funding in the long run to the same size districts.

Questions:

- 1) Can districts adjust to this decline as quickly as it is occurring and continue to provide quality educational services to the students?
- 2) If districts need additional time to reduce enrollments, how should that adjustment be structured: graduated basic entitlement, soft caps, lagged ANB, or averaging ANB? Who should pay for the adjustment: local taxpayers or state and local combined?

Comparison of Elementary and High school entitlements (a, b, l,)

Montana's per ANB entitlements for elementary and high school are significantly different. The high school per ANB rate is 33% higher than the elementary rate. Is this the appropriate difference?

Elementary compared to High schools

Analysis

Comparison to other state formulas

The National Center for Education Statistics (NCES) does not collect information regarding expenditure by level (i.e. elementary, middle school, high school).

Education Commission of the States (ECS) did a comparison of seven rural states' formulas and found that most do not provide a difference in the amounts allocated to high school and elementary students. It is difficult to know how many of these states have separate K-8 and high school districts as most states do not have separate districts. If a state does not have separate elementary and high school districts and does not provide weighted funding, it is not possible to determine if the districts spend the same on elementary and high school education or not.

Nebraska, North Dakota, and Minnesota do provide weights for elementary, middle school, and secondary students. North Dakota has a complex schedule of rates (see Appendix 2),

This chart attempts to simplify the relationships:

Elementary vs. High School Comparison

Table 4

District Size	Elementary (1-6) weight	High School (9- 12) weight	Percent difference
Montana			
Basic	18,540	206,000	1011%
Per ANB	3,763	5,015	33%
North Dakota			
Smallest	1.2012	1.4905	24%
Largest	0.9706	1.0473	8%
Nebraska			
All	1	1.4	40%
Minnesota			
All	1.06	1.3	23%

Note: Most other states do not have an equivalent to our Basic entitlement. They have different methods of addressing small schools, such as adjustments for sparse population.

Comparing High school and elementary percent of maximum budgets

Another way to compare high school and elementary entitlements would be to see if elementary or high schools tend to be a closer to the maximum budgets.

Percent of districts at 97% or higher of Maximum Budgets

Table 5

Year	Elementary	High School
1995	21%	21%
1996	25%	26%
1997	28%	25%
1998	34%	27%
1999	38%	29%
2000	40%	35%
2001	40%	38%

This table would give an indication that there is some tendency for elementary districts to be closer to the maximum budget than high schools. The tendency

may also be reflecting that elementary districts experienced declining enrollments quicker than high school districts.

Comparison of how elementary and high schools spend the funds available to them

While there is approximately \$1,000 per ANB difference in the spending between high schools and elementary schools in both the general fund and the all funds budgets, the cost differences are concentrated in a few areas. High schools spend \$200 or more per ANB than elementary schools for instruction, operation and maintenance of the building, and other (primarily includes food service and extracurricular). Table 6 below gives the details.

Comparing Elementary and High School Costs FY 2000				
Table 6				
Function	General Fund		All Funds	
	Elementary	High School	Elementary	High School
Instruction	\$ 2,590	\$ 2,887	\$ 3,459	\$ 3,706
Support Services	\$ 344	\$ 420	\$ 499	\$ 525
General Adm (Supt/Clerk)	\$ 215	\$ 281	\$ 277	\$ 359
Bldg Adm (Principals)	\$ 251	\$ 299	\$ 313	\$ 352
Bldg Oper and Main	\$ 444	\$ 642	\$ 561	\$ 743
Student Transportation	\$ 4	\$ 37	\$ 262	\$ 355
Other (food, extra curric)	\$ 52	\$ 293	\$ 280	\$ 581
Debt Ser Facil Acq	\$ 20	\$ 29	\$ 233	\$ 284
Total	\$ 3,920	\$ 4,887	\$ 5,882	\$ 6,905

See Appendix 1 for further details.

Size differences small versus large (a, b, l)

Little analysis has been done since the initial creation of the funding formula on the issues of the relative funding of small and large schools; and elementary, middle school, and high school funding. Table 7 on the following page gives some indications, but more work is necessary to determine if the funding formulas are accurately reflecting the costs associated with these school facilities

Table 7 demonstrates that there are types of schools that tend to have higher budgets as a percent of maximum than other types. Overall, there is significant dispersion among districts from the Base to the Maximum budgets, but specific areas stand out.

Although the cause is unclear, the majority of all elementary districts over 850 students are at 97% or greater of the maximum budgets. It may be that large

districts offer more services, pay higher wages, have declining enrollment, or the formula is not accurately reflecting their costs.

Districts % of Maximum Budgets FY 2001

Table 7

Size	<90%	<97%	97% to over max	Grand Total
E > 2500	-	1	5	6
E 851 - 2500	6	3	10	19
E 401-850	14	3	6	23
E <400	109	34	92	235
H >1250	1	3	3	7
H 201-1250	22	5	9	36
H < 201	25	12	30	67
K 400-1909	7	3	3	13
K < 400	7	8	27	42
Grand Total	191	72	185	448

Note: E – elementary, H – high school, and K – K-12 districts.

The majority of Mid-sized high schools on the other hand are below 90% of maximum budgets. Again the cause for this is not apparent.

Conclusion:

The question of the relative funding of large and small schools is important to the study of school funding. There is much to learn about the cost differences between large and small schools. Further research into the services necessary and the costs associated will be necessary to draw conclusions.

Questions on size and level

- 1) Are elementary and high school districts funded relatively the same? Are small and large schools funded relatively the same? Are they equally able to meet the services that the community expects? Are they equally able to meet accreditation standards?

Much information exists as to how much school districts spend. Yet there has been little work in analyzing if what we are spending is getting the results that are desired and if the amount we are spending is appropriate for each educational level. Determining the appropriate level of measurable services and the cost of providing those services at various levels of education and sizes of schools may

be necessary to determine if the funding formula correctly addresses those issues.

- 2) What level of service should be guaranteed by the state and how much should be left for local decisions?

Our general fund formula allows districts to be within a 25% range of spending per student. The state guarantees the BASE level of funding and presumably, a BASE level of services to be offered. What is the level of service that should be provided at the BASE level?

Do current budget computations prohibit or discourage local decisions to consolidate school districts? (c)

School district size and configuration is a local decision in Montana. Do aspects of the school funding formula hinder cost effective or educational improvement consolidations?

General fund

The Basic entitlement may provide a disincentive to consolidation. Two districts are eligible for two Basic entitlements, but in most cases, a consolidated district being eligible for only one. If reductions in costs offset this loss in revenue, there will not be a disincentive.

The per-ANB entitlement decreases as the number of students increases. When two districts consolidate, the per-ANB entitlement will decrease for the combined district.

Over the past several legislative sessions these two concerns have been addressed. The effect of the two above concerns has been mitigated for the first three years and is now phased in the second three years after consolidation.

Retirement

Does the countywide retirement system provide an incentive or disincentive to consolidation? In consolidation cases that are within a county, countywide retirement is unlikely to provide incentives for or against consolidation. However, when consolidation is across county lines, taxpayer advantages or disadvantages may affect decisions about consolidations.

Transportation

Are increased transportation costs of a consolidated district a disincentive? If the state funds a greater or lesser share of the actual costs per district and if the consolidation requires additional transportation of students, then the formula may provide an incentive or disincentive for districts to consolidate.

Taxes

Are there tax disincentives for consolidation? If so, what are they?

When a district has local wealth, either from high taxable values or high non-levy revenue, there is a disincentive to consolidate. Consolidation in these cases will cause increased property taxes to the wealthier district.

Other States

Other states fund districts based on the sparseness of the district. Very rural and isolated districts receive additional funding to cover the increased cost of educating these students. The funding would not vary based on the number of districts serving an area. The advantage to this is that the funding structure would not influence, positively or negatively, the consolidation of districts. Consolidations would be based more on educational reasons. However, taxes would still play a role in the incentives of districts to consolidate.

Conclusion:

Some aspects of the school funding formula are disincentives to consolidation. Many of these disincentives are tax related and encourage property and non-levy tax wealthy districts to remain isolated.

As the Advisory Committee continues to look at the relative funding of elementary versus high school and small versus large schools, it may be more apparent how the funding formula is affecting which school consolidation decisions.

Questions:

Does the funding formula accurately represent the cost of operating a district through the Basic Entitlement? Is the Basic Entitlement the best way to represent the cost of educating students in rural areas, i.e. would sparseness be a better representation?

Facilities (e)

The decisions to build, remodel and renovate are all done at the local level. There is no statewide information regarding buildings. The funding for the buildings is done primarily by local district taxes. Districts can finance building projects in one of two ways: the building reserve fund and debt service.

Building Reserve

The building reserve fund is intended to be flexible to allow districts to build up a reserve for a building project, to equip or enlarge a school building, or to purchase land. Building reserves may not exceed 5 years and must be approved by the local voters.

The building reserve fund adds district flexibility to address local needs and plan for the future. However, it is an area of the budget that is not equalized. It has no

maximum or minimum budget, and can vary significantly according to the ability of the local district voters to approve the mill levy.

Debt Service

Local districts must pass a bond issue from the local voters in order to establish a Debt Service Fund. Once the voters approve a bond issue, the state will reimburse the district for a portion of the bond payments through the School Facility Entitlement program.

School Facility Entitlement

The State of Montana has guaranteed tax base program to assist districts that have a taxable value per Average Number Belonging (ANB) less than the guarantee level of 121% of the average taxable value per ANB.

- The annual entitlement is limited by a maximum entitlement per ANB as follows: Elementary - \$220 per ANB, Junior High or Middle School - \$270 per ANB, and High School \$330 per ANB.
- Districts are entitled to an advance on the first year's bond payment, which allows districts to cover lags in funding and to be assured how much they will receive in the first year.
- Funding is limited to the appropriated amount. If the calculated payments are greater than the appropriation, payments are prorated. In recent years, the appropriation has been close to or exceeded the calculated amount. In FY2001 payments were prorated at 97.7% of the calculated amount.
- The program applies to bonds issued after July 1, 1991.

Total bond payments in FY 2000 were \$27.5 million. The state school facility payments were \$3.4 million or 12% of all bond payments and 21% of the bond payments for bonds issued after July 1, 1991, the only bonds eligible for reimbursements.

Conclusion:

Local control is important to Montana and it minimizes the amount of state bureaucracy needed to manage a facilities program. The state is helping districts provide facilities for the schools on a wealth-neutralized basis, which is important to equalization of services to students. Recent legislation should better enable many extremely low taxable value districts to use impact aid (PL 874) funds to pay bond payments and qualify for state aid as well.

Areas of school facilities funding that might be improved

- The annual entitlement limitation may not accurately reflect higher per ANB cost of small enrollment school district facilities.
- State payments are not adjusted for any other types of local district financial resources other than property tax value.
- Small districts may not have continuous building projects and may only have bond payments for 20 out of every 40 years, while larger districts

have new projects every few years and have a steady stream of bond payments throughout time. As a result, over the long term, the state will pay a higher proportion of all payments to larger districts.

Questions to consider:

- 1) Is the same level of support for large and small districts appropriate? Should the state provide a higher level of support to small districts?

The table at the right, Dollars expended in FY2000, demonstrates how size of district affects the amount of expenditure per student. In elementary districts the size/dollars per ANB spent appears to be inversely related, i.e. the larger the district the less spent on facilities and bonds. High schools do not appear to have this same trend; the highest spending group is in the middle of the size categories.

Elementary schools contain both elementary and middle school students and the facilities expenditures average \$233 (note this average includes more than just bond payments), while the bond payment entitlement rates are \$220 for elementary and \$270 for middle school.

High school facilities expenditures average \$284, while the bond payment entitlement is \$330 per student.

DOLLARS EXPENDED FY2000	
Description	Bonds/ Facilities
Elementary > 2500	180
Elementary 851-2500	260
Elementary 401-850	248
Elementary 151-400	273
Elementary 41-150	284
Elementary < 40	342
Total/Elementary Pupil	233
High School > 1250	320
High School 401-1250	126
High School 201-400	463
High School 76-200	259
High School 75 or less	343
Total/High School Pupil	284
K-12 > 399	329
K-12 < 400	409
Total/K-12 Pupil	359
Total/Montana Pupil	263

- 2) Should districts be eligible for school facility entitlements if they have no bond payment, but do have a building reserve?

This would offer small and large districts a way receive state support for facilities without having to bond. Districts could use the funds to either save for a larger project or apply to remodeling or renovation.